## Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of	)	
Review of the Emergency Alert System;	)	EB Docket No. 04-296
Independent Spanish Broadcasters Association, the	)	
Office of Communication of the United Church of Christ, Inc., and the Minority Media and Telecommunications	)	
Council, Petition for Immediate Relief;	)	
Randy Gehman Petition for Rulemaking	)	

#### **REPLY COMMENTS OF**

#### THE BROADCAST WARNING WORKING GROUP

The Broadcast Warning Working Group (BWWG) currently consists of seven hands-on Emergency Alert System (EAS) subject experts from the fields of broadcast association management, broadcast radio and television engineering management and support, radio and television news, industry technical publication, and state EAS Committee leadership. The BWWG hosts the EAS Forum at [http://eas.radiolists.net/].

On the EAS Forum's email list server, industry stakeholders share knowledge and experience that is factored in to the BWWG's EAS articles, resources and Comments addressed to the Commission such as this document. Significant recent resource contributions of the BWWG to EAS development and improvement have included a comprehensive and detailed comparison of features of new EAS devices, postings to summarize and explain EAS industry news for all stakeholders, and active participation as presenters in recent DHS/FEMA IPAWS EAS Roundtables. The BWWG is also a partner with other stakeholders in EAS educational projects sponsored by the National Alliance of State Broadcasters Associations (NASBA) and the National Association of Broadcasters (NAB).<sup>2</sup>

## I. HIGHLIGHTS OF FILED COMMENTS AS SEEN BY THE BWWG

- A. Must have equipment to Convert CAP formatted messages to EAS compliant messages.
  - 1. Many Commenters, including the BWWG, asked for a delay of up to one year beyond the current deadline of September 30, 2011.
- B. Proposal to use RSS for distribution of CAP messages. Also proposal that state servers be RSS push devices rather than other means of distribution.
  - 1. The BWWG has learned that FEMA has decided to use the ATOM feed format, not RSS. BWWG was alone in asking the Commission to not specify any feed format in Part 11 because feed technology is a moving target. The BWWG stands by its call in our Comments for no feed specifications in Part 11.
- C. Should intermediary devices or converters from CAP to EAS be allowed?
  - 1. The BWWG was in the minority of Commenters pointing out that CAP converters will hold back the much needed conversion away from legacy EAS and that there will be ultimately be no cost savings to those buying CAP converters when SAME EAS does go

<sup>&</sup>lt;sup>1</sup> For detailed information on the BWWG's core members, please see [ http://eas.radiolists.net/about.html ]

<sup>&</sup>lt;sup>2</sup> This joint stakeholder effort has a website resource for various resources to help broadcasters with the transition to a Common Alerting Protocol-enabled Emergency Alert System: http://easalert.org/index.php

away. We feel it is a mistake to authorize or otherwise officially sanction any device that would have the effect of limiting the forward progress of the EAS. These converter devices create a hybrid, 2-box, system that will always be subject to the limitations of the older EAS legacy equipment. CAP converters are clearly limited in their capability when compared to other equipment options that are not subject to those limitations and, as such, should be rejected by the FCC.<sup>3</sup>

- D. Should the FCC certify all in one CAP/EAS devices? Should they also certify CAP converters as separate devices?
  - 1. Apparently no clear direction on this from Comments. The BWWG says, "yes" to FCC certification. The BWWG's position on the CAP converter issue is that these devices will hobble progress to sunset legacy EAS, a necessary move to improve warnings, especially for disabled persons. The FCC should certify all in one CAP/EAS devices that can be upgraded via on-line methods. The FCC must be aware that many legacy EAS devices are no longer manufactured or supported. The addition of a CAP converter box will unnecessarily drag out the process of ending the era of SAME.
- E. Extend 180-day Rule start beyond 9 /30?
  - 1. The BWWG along with NASBA, NAB and others believes 180 days is the correct extension length. Comments range from 90 days to 360 days. At least one manufacturer says no delay in the deadline.
- F. Proposal for must-carry governor's messages only if in CAP format.
  - 1. Most agreed, but the BWWG told the FCC that the governor must-carry activation r is a bad idea. Instead, we called for State Plans to identify a limited number of EAS event codes as must-carry. The BWWG will further address the issue of having those codes so identified being originated using the CAP on Reply.
- G. Comment sought: New governor must-carry code?
  - 1. The BWWG said a governor must-carry code would not be a good idea. EAS event codes should be event-driven.
- H. Propose/Comment sought: Simplify EAN procedure?
  - 1. Most Commenters, including the BWWG, thought the EAT should go.
- I. Eliminate EAT and replace with EOM?
  - 1. Most Commenters agreed. The issue as the BWWG sees it is that the existing EAN ends with an EOM and that is sufficient.
- J. Comment: should the (2-tone) attention signal go away?
  - 1. There was some difference of opinion on this. The BWWG believes it should be retained and be no more than 8 seconds long.
- K. How can CAP improve access for disabled?
  - 1. Georgia Tech, Galaudet and the Rehabilitation Engineering Research Center on Telecommunications Access and the National Association of the Deaf filed excellent Comments on this topic. The BWWG sees these Comments as major support from true experts on how best to serve the warning needs of the disabled and a clear mandate to accelerate the sunset of legacy EAS.

# II. DISCUSSION OF COMMENTER'S FILINGS FROM THE VIEWPOINT OF THE BWWG A. AT&T

- 1. AT&T has polling interval concerns, and wants the handbook retained.
  - a) The Handbook is nothing more than a rough approximation of how EAS 'might' work. It is so at odds with how EAS actually works in practice that some SECC Chairs advise EAS participants to comply with the Rules by having it on hand, but in the event of a National Emergency, ignore the Handbook and take

<sup>&</sup>lt;sup>3</sup> If in fact so-called CAP Converters are going to have to be a fact of EAS life we have to accept for the present, the BWWG hopes that the Commission will realize they made a mistake and do everything possible to correct it.

- direction on EAS implementation from their local plan. What the BWWG feels is needed is a requirement in Part 11 that a section on 'how EAS works' be included in plan documents developed by their state's SECC and/or local/regional LECC.
- b) The BWWG suggests that, no matter what is decided on the future of the Handbook, the FCC should require all licensees to have a copy of their applicable State and Local EAS plans and a copy of Part 11 at their EAS control point.
- 2. AT&T: "For the foregoing reasons, the Commission should limit the number of state RSS feeds an EAS Participant must monitor
  - a) The BWWG disagrees with AT&T on limiting the number of CAP feeds. In the future, how would they suggest that plans deal with Operational Areas where two or three states need to be monitored? Cases in point: Nevada and California. The DC Beltway complex. There are many more examples where it would be impractical to limit the number of CAP feeds to be monitored.
- 3. AT&T: "...declines to adopt a specific timing interval for polling state RSS feeds or to leave such intervals to the states to develop in their State EAS plans within reasonable limits set by the Commission; and retain the EAS Operating Handbook."
  - a) The BWWG disagrees. The Commission must leave decisions on such matters to state and local committees. One size does not fit all, and this is an issue where LECC's and SECC's should be able to reinforce the sometimes fragile LP 'daisy chain' distribution model as best as possible without being hampered by the limitations of EAS equipment.
- B. American Cable Association (ACA) wants:
  - 1. Extend deadline
    - a) The BWWG agrees
  - 2. Grant small operators an additional 12 months
    - a) The BWWG agrees
  - 3. Exempt systems with 500 subscribers or less
    - a) The BWWG disagrees. The BWWG believes that this proceeding provides the FCC with the opportunity to accomplish a number of badly needed positive improvements for the EAS. One really needed improvement would be to bring local EAS alerts to many areas served by translators or small cable systems. Often such sources merely relay alerts from 'mother stations' that are perhaps hundreds or thousands of miles away or even in different states. The BWWG believes each EAS participant full power, LPFM, translator, or cable should have and implement an EAS device that can disseminate local alerts.
    - b) An issue does arise for such translators and other EAS participants, including small cable systems, and LPFM and full power broadcast stations in depressed areas. This issue concerns the cost to purchase of EAS devices and the cost to connect to the Internet, to receive the CAP data. The BWWG realizes that many EAS participants, such as the non-commercial EAS participants have limited income, and many translators and small cable systems, especially in the rural West, are operated on a volunteer and financial shoestring, supported only by donations and/or gifts while in other cases many community translators are supported by a dedicated property tax.
    - c) The BWWG also believes that additional attention needs to be given to alternative signal paths to isolated EAS participants in multi-state operational areas. As one size does not fit all, we suggest giving the SECC/LECCs latitude in deploying CAP in their areas.
    - d) Another substantial way the FCC can mitigate the financial burden of Internet connectivity would be to direct FEMA to provide its CAP data via multiple means: not merely the wired Internet, but via the several satellites that deliver

various program services to broadcasters. Such data delivery would require that many EAS participants need only add a receiver to their existing satellite reception gear, resulting in a one time expense, rather than see them incur a recurring expense just to receive an Internet feed for CAP data. The modest cost of a FEMA CAP aggregator uplink would help to counterbalance costs borne by EAS participants in the field, especially when some EAS participants would otherwise need to install and pay for expensive Internet access at transmitter sites.

- e) Such a redundant message pathway would also address the growing concern over cyber-attacks and cyber-security. While we realize that FEMA's decisions about message pathways are not within the purview of the Commission, we hope that due consideration will be given to this issue.
- 4. Waive CAP where there is no Internet service, but verify
  - a) The BWWG believes that waiver requests, if allowed, must be accompanied by a written certification signed by an officer of the cable system that no IP connectivity is available, why, and when such service can will be available.<sup>4</sup>
- 5. Hardship waivers for cable systems
  - a) The BWWG first has to wonder about the motives behind this request by ACA. People are still paying for cable service. The BWWG feels that the issuance of hardship waivers has to be balanced against the need to get timely and effective warnings to a public at risk and the cash flow needs of cable operators in business to make a profit. In markets served by only one or two broadcasters, waivers should not be granted. If the issue is that the one-time cost for new EAS equipment will put an EAS participant out of business, one has to wonder how viable the business plan is for an entity requesting a waiver.
- C. Association of Public Television Stations (APTS)
  - 1. Wants CAP converters says a lot of their members already bought them.
    - a) With all due respect to our fellow EAS stakeholders in the public television industry, the position of the BWWG is while CAP converters have and will be installed, they will ultimately have to be replaced with fully CAP-compliant equipment when legacy EAS finally sunsets. The legacy EAS equipment that will be used with CAP converters cannot be upgraded to produce more descriptive warnings for television and cable, and will not have the capability to deal with new codes, or existing codes that could be made mandatory. The phrase, pennywide and pound-foolish comes to mind.
  - 2. Wants to extend deadline at least 120 days
    - a) The BWWG agrees there should be an extension. The BWWG is asking for 180 days along with NASBA, the NAB and several other EAS stakeholders.
- D. Christian Vogler Comments of the Rehabilitation Engineering Research Center on Telecommunications Access and the National Association of the Deaf
  - 1. Wants immediate implementation of CAP
    - a) The BWWG agrees in principal with the Center, but knows realistically we cannot sunset legacy EAS immediately. The Commission should however give a lot of weight to comments by the Center and other representatives of disabled communities and do everything possible to set a date-certain to sunset legacy FAS
    - b) The BWWG is left with the feeling that if the FCC unnecessarily delays the implementation of CAP, they are in fact literally throwing the various disabled

<sup>&</sup>lt;sup>4</sup> This will not be an easy issue to deal with. The BWWG is aware of a few small cable systems in Maine that do not have Internet connectivity. And, as stakeholders in the television industry learned the hard way during the DTV transition, there are many areas of the country that do not have access to cable or a clear line-of-sight view to the geostationary satellite arc.

communities under the bus. In a post 9-11, Katrina world, no segment of the general public should have to wait for access to the many improvements to emergency warnings that the CAP can provide.

- c) A paragraph in the Center's Comment is worth repeating:
  - (1) "However, we are concerned that the proposed rules allowing EAS participants to meet their CAP-related obligations via converting CAP-formatted messages into SAME-formatted messages will perpetuate the current state of limited accessibility to the EAS by people with disabilities. It needs to be made clear that the conversion of CAP to SAME is only a stopgap measure, and that a fully CAP-capable alerting network needs to be built from the ground up in parallel."

#### E. FastHealth

- 1. FastHealth has a PATENTED solution they want used, and submitted their patent as part of their Comments.
  - a) The BWWG could not disagree more with introducing anything new into the warning process that involves a patent. Great pains were taken in the development of the Common Alerting Protocol (CAP) standard through OASIS to assure CAP would be open and non-proprietary. Warning distribution means should not be viewed as profit centers. This is not the time, place or subject for a discussion on new, patented equipment.

## F. Moody Bible et. al.

- 1. Moody et. al. say they can't find CAP equipment at good price in time to meet deadline
  - a) The BWWG would take issue with that claim.
- 2. They want a main studio waiver
  - a) The BWWG believes that the needs of a public at risk in communities served by one or a few EAS participants far outweighs the wishes of operators who produce little or any local programming and who view anything needed to produce local content, including local warnings, as an unnecessary expense. In these 'hub station' or 'satellator' situations, the parent or hub station has in the past made a choice not to broadcast EAS activations based on the value judgment that the warnings do not apply to all the stations in their 'satellator' group. Up until now these exemptions have been condoned because there has been no way to effectively monitor EAS activities, receive the appropriate activations for specific EAS participants and maintain EAS logs. With CAP technology, that is no longer the situation. These EAS participants should (and now can) serve their communities like any other EAS participant. If they are deriving revenue from these communities, the least these operators can do in return do is serve their audiences with local public warning information. The very loyal audiences of this type of station generally do not listen/view other stations so, the Commission must also weigh the real world reality that 'satellator' stations may be the only way some audiences could receive warning information for an emergency.

## G. Kenneth Evans

- 1. Mr. Evans proposes ".... that the part 11.51 Rule include a reference to the inclusiveness of rules for persons with disabilities, so that it might be minimally cross referenced here in this section so that all the requirements on video program sources understand the message is an Emergency Communication and everyone has the right to receive that message as mentioned in section 79.2 as mentioned in paragraph 189."
  - a) The BWWG agrees but must point out that the faster the CAP is implemented and legacy EAS is phased out, the faster there will be true compliance with Mr. Evans' proposal.

- b) The BWWG understands the logistical issues involved in any changes at the National Weather Service, which has only recently upgraded its alert systems in various ways. However, the reliance on SAME continues the problems that TV EAS participants have, in particular, in providing detailed, accurate information for their text crawls, for example. The BWWG hopes the FCC will encourage the NWS to move to implement CAP as soon as possible.<sup>5</sup>
- 2. Mr. Evans further proposes, in part"... that in 11.51 sub paragraph (d) be more inclusive of all media that provide video programming not just Broadcast television as shown here."
  - a) The BWWG agrees not only with Mr. Evans, but also with Comments filed by all other representatives of disabled communities who took the time and effort to file Comments in this proceeding on behalf of their respective 'warning-underserved' communities.

#### H. NASBA

- 1. The FCC should minimize the changes to Part 11 of its Rules while it defers certain issues to a planned broadband proceeding.
  - a) NASBA is apparently taking a "transitional approach" to CAP and other changes to Part 11. While agreeing in principal with NASBA, the BWWG feels the FCC must be flexible enough now to allow broadcasters in CAP-compliant states to send the full text of an EAS message rather than just the SAME information. There should be a clear and loud message sent with any FCC Report and Orders on 04-296 that the Commission will not stand in the way of the progress that states wish to make to better protect their populations.
- 2. NASBA wants to position the EAS State Emergency Communications Committees SECC's as "change agents".
  - a) The BWWG heartily agrees and commends NASBA for clearly identifying the vital role of the SECC's and LECC's to improve the EAS, and transition it from legacy restrictions to produce better warnings at all levels. While it is of common opinion that the deadline for installation of CAP/EAS devices needs to be extended, in some areas another 180 days might not be sufficient. The reason for this is the need for the state and local message-originating authorities to bring some sort of CAP-capable message origination system to their areas. Purchasing an EAS device before EAS participants know how and when CAP will be delivered seems to us to be an unwise and "backwards" process.
  - b) For example, there will be no way to test a CAP device's functions until CAP delivery is made available. Because one size does not fit all, the BWWG suggests that the deadline for installation/connection be 120 days <u>after</u> the SECC/LECC plans are put in place for a given state. Mandating purchases before this time may be perceived more like an administrative action to make EAS participants liable to punishment rather than an encouragement to state and local agencies to put truly effective updated plans into place.
  - c) A "final" deadline might be appropriate, perhaps at the end of 2012 or in the spring of 2013, but only if the FCC were to ensure SECCs and LECCs bring a plan to their operational areas.
- 3. NASBA asks that GMC not be put in the Rules
  - a) The BWWG most certainly agrees. State and local plans must make recommendations on what EAS participants should do with EAS activations. We refer the Commission to the BWWG's Comments.<sup>6</sup>

<sup>&</sup>lt;sup>5</sup> Please see Section III A in these Reply Comments, The SAME issue for further thoughts on this important issue.

<sup>&</sup>lt;sup>6</sup> The BWWG Comments on 04-296, Page 2: As any professional emergency manager will tell you, all emergencies are local. It makes little sense for a governor in a state capital to issue a statewide warning about an emergency in front of their state capitol building, much less at the other end of his or her state. The proper people to carry out the

- 4. NASBA requests a 180-day extension.
  - a) The BWWG also asks for a 180-day extension.
- 5. NASBA also suggests, "revised Part 11 Rules should adopt a 'Notice' or 'Self-Certification' process whereby EAS participants can certify to the Commission that they lack access to broadband and thus cannot reliably receive CAP-formatted messages via an RSS feed, or by other Internet transmissions.
  - a) The BWWG suggests that if the Commission is going to require certification due to claims of lack of access to broadband that Part 11 clearly should clearly state that certification documents making this claim must be signed by an officer of the licensee.
  - b) The BWWG believes that some consideration must be given by the Commission to determine how extensive this problem is. A survey conducted within one state by a core member of the BWWG showed that none of the EAS participants had a problem with Internet access, other than cost.
  - c) If some sort of self-certification program is offered, there should be a time limit on the certificate, possibly tied to half way through a license renewal period. Just because an area doesn't have Internet service this month doesn't mean it's not going to be available next month or even next year.
  - d) While not brought up as far as BWWG knows in 04-296 Comments, we further believe that the need for a broadband Internet connection (where available) for CAP based EAS equipment should be clearly stated in the Commission's Rules. Discovery of a licensee not connecting their CAP capable EAS equipment to an available IP connection would, we expect, subject the licensee to FCC action.<sup>7</sup>
  - e) The BWWG believes that if FEMA or the FCC can work with broadcast program syndicators to set up access to the federal CAP aggregator on existing satellite transponders, it will remove the argument that CAP reception is not available.<sup>8</sup>
- 6. NASBA says in the absence of a separate FCC CAP certification process, making it clear that the FCC will accept FEMA certifications is the only way EAS Participants will have the certainty needed to ensure that their equipment purchases are compliant with Part 11.
  - a) The FCC really needs to adopt its own certification process because the FEMA standards are not sufficient for broadcast and individual broadcasters, states, or EAS committees do not have the capability to test for Part 11 compliance.
  - b) The BWWG must state the obvious: There may be elements of a re-written Part 11 that were not covered by the FEMA certification process that the FEMA process could never have tested for!
  - c) Further, the BWWG believes the industry should have some assurance that after Part 11 is re-written that all authorized EAS equipment, new CAP converter,

warning function using the EAS have already been duly designated under law and in the state EAS Plans. They are professional emergency managers. BWWG subscribes to the premise that emergencies are 'event driven' and that imposing a mandatory requirement that broadcasters carry a governor's message makes no sense. The proper role for governors during emergencies in our view is assuring that state resources are available to state and local emergency managers, and to go on the air using non-emergency broadcast resources to give support and reassurance to victims, residents, first responders and even emergency managers. Strictly speaking, a Governor Mandatory event code is NOT a true warning function and should not be made a part of Part 11 by the Commission.

<sup>&</sup>lt;sup>7</sup> There are obviously other issues connected with IP polling that would also potentially trigger compliance measures.

<sup>&</sup>lt;sup>8</sup> The AMC-1 and AMC-3 satellites, among others, now carry a great deal of the syndicated programming in daily use by many radio broadcasters.

and CAP legacy, will all "play nice" together with all legacy and new EAS equipment. Absent FCC certification, the BWWG wonders how that assurance can be given.

- 7. NASBA agrees with TIMM (as did the BWWG) on the question of abolishing the NN (non-participating) status.
  - a) The BWWG reasons, as did others, that because NN-designated entities have to install EAS devices to know when to go off the air when an EAN occurs, it would be much less disruptive to those very entities to run the EAN.
  - b) Because we have no assurance that the Commission will delete the NN designation, we feel it appropriate to cover that eventuality for any existing NN entities as well as any ones that may be so authorized in the future. Since existing NN entity were supposed to send the FCC a letter of notification of non-participation, the FCC should, as part of the overall EAS improvement process, notify SECC's about those NN stations in their respective states. SECC's need to determine how many NN entities in their areas and, determine if they might have an EAS warning coverage problem, so they can take proper measures to make sure the public receives National level EAS warnings in those areas. <sup>9</sup>

#### I. NAB

- 1. FCC should adopt "flexible" Rules.
- 2. NAB also says FCC should go with FEMA conformance.
  - a) The BWWG must respectfully point out that FEMA is not directly concerned or responsible for FCC EAS compliance standards. Their IPAWS-based conformance testing was built to analyze IPAWS CAP for broadcasting, not specific broadcast needs that are covered in Part 11.
- 3. NAB submits that any changes to the Part 11 Rules should not cause this equipment in the field now to be deemed non-compliant.
  - a) The BWWG agrees, but we believe there should be a date-certain set so we know how much longer we are tied to the limitations of legacy EAS.
- 4. Part 11 Rules should not dictate EAS terms and conditions for state-level EAS systems, given that approximately 18 states already have systems capable of distributing IP-based CAP EAS messages, with several others close to introducing their own CAP-based systems.
  - a) The BWWG agrees. We strongly suggest that EAS entities that have the ability to produce better warnings for their audiences by using CAP messages instead of SAME messages should not be fined or punished.
- GMC OK, but note below.
  - a) The BWWG disagrees with NAB that GMC is OK if GMC is based on the office of the person originating a warning rather than basing warnings on warning needs driven by events. To this end we suggested in our Comments that a limited number of mandatory event-driven EAS codes be identified. Such codes should be designated in State Plans so that broadcasters and cable operators know the specific non-weather event codes that should be treated as mandatory.<sup>10</sup>
- 6. 180 day extension
  - a) The BWWG agrees.

<sup>&</sup>lt;sup>9</sup> The BWWWG believes that "proper measures" might include but should not be limited to suggestions that could be made after listening to their concerns that led an EAS participant to apply for NN status.

<sup>&</sup>lt;sup>10</sup> BWWG Comments, Page 21: "The BWWG believes that governor mandatory and governor-designee mandatory EAS is a mistake that should not find its way into the Rules. States should be allowed the flexibility to determine who should originate activations and which event codes should be mandatory for their broadcasters."

- 7. The use of intermediary devices is a cost-effective option that satisfies an EAS participant's CAP obligation and Is already deployed in the market
  - a) Again, the BWWG must respectfully point out there should be a time limit on the use of these devices, State broadcaster associations working with SECC's should survey EAS participants to determine who has these devices and how many there are in their operational areas for the purpose of planning the sunset of the SAME EAS protocol.
  - b) SECC's must know which areas will continue to provide only the SAME message and which areas will be able to provide complete emergency messages. That kind of community warning profile information would be helpful for emergency managers trying to decide whether to issue an EAS activation or use other means to warn the public.
- 8. The architecture of state EAS networks and monitoring of state-level CAP should be addressed in state EAS plans
  - a) The BWWG wishes to remind the Commission that this is very the purpose of a state plan and that SECC's must be given the opportunity re-write their state plans based on whatever Part 11 Rules revisions the FCC adopts <u>before</u> we begin using CAP in earnest.
- 9. The Commission need not specify studio encoding of CAP-formatted messages in its Part 11 Rules because equipment manufacturers will follow ECIG performance guidelines.
  - a) The BWWG agrees. As the BWWG states elsewhere in our Reply Comments, feed formats are a moving technological target difficult to pin down since better ones are always being introduced.
- 10. NAB also says EAS entities should be able to self-certify for IP non-connectivity.
  - a) The BWWG agrees as long as Part 11 specifies that the certification document be signed by an officer of the licensee in question with the implied risk of periury for false statements.
- 11. NAB supports the use of intermediary devices as a cost-effective option that will fully satisfy an EAS Participant's CAP obligations.
  - a) The BWWG respectfully disagrees with the NAB on this point, feeling that an unintended consequence may be to drive audience away from broadcasting for more complete warning information. The BWWG would hope that the NAB should, in the spirit of better local public service as well in the best interests of all broadcasters, encourage use of fully CAP-capable equipment to the greatest extent possible. Full CAP capability will provide more complete emergency information to audiences.
  - b) Therefore, the BWWG suggests that the FCC and the broadcasting family all agree that audiences will not be served well by asking for Part 11 policies that could have the effect of sending broadcast and cable audiences away from EAS to their cell phones or computers.
  - c) Broadcasters and cable systems can and should convey forthwith CAP-rich warning information with significant benefits to a public at risk that far eclipse the paucity of information conveyed in legacy EAS event codes.
- 12. Keep the handbook. State plans could be a substitute.
  - a) The BWWG asks, why keep the Handbook if core EAS compliance and operational information can (and should) appear in new Local/State EAS plans? The Rules should state that licensees should have 3 documents posted for reference 1) FCC Part 11. 2) Applicable State EAS Plan(s) 3) Applicable Local Plan(s).
- 13. NAB cites the need for what to do in event of a national emergency
  - a) The BWWG feels all EAS devices should be operated in the automatic mode.

- b) National level procedures can and should be explained in the State or Local Plan and integrated with specific state and local instructions. Those instructions should also tell EAS participants what to do if the equipment does not perform properly during a national EAN live code test or a real a national emergency where an EAN is originated by FEMA.
- c) The BWWG must remind the Commission that state and local plans cannot tell an operator in a broadcast station or at a cable head end how to run a specific brand of equipment. There is still a need for each EAS participant to provide specific information for operators based on specific equipment installed. Part 11 should outline this need very clearly.
- d) The BWWG suggests that the Rules should charge all licensees with the responsibility to maintain specific instructions for their operators on how to deal with all levels of EAS activity.
- 14. NAB also calls for a 180-day delay in implementation.
  - a) The BWWG agrees.

#### J. NCTA

- 1. The NCTA also calls for a 180 day extension
  - a) The BWWG agrees.
- 2. The NCTA asks the FCC to conduct their own separate certification process.
  - a) The BWWG agrees per arguments presented in its own Comments and in these Reply Comments.
- 3. The NCTA believes that the governor mandatory provision should be allowed, but not for governor-designees.
  - a) As outlined in great detail in the BWWG Comments and in this Reply Comment, governor-mandatory EAS stands in direct and harmful opposition to the basic principles of emergency management. Emergencies are events. The specifics of these unfortunate events should be the heart and soul of warnings, issued directly by the literal and figurative brains behind the management of emergencies. With all due respect, governors should be appointing qualified emergency management professionals to manage emergencies and produce timely and effective public warnings that carry timely and specific protective actions to be taken by the public to protect their lives and property.
  - b) EAS messages are Public Warning Messages and, as such, must not be subject to the delays that would be the case if a specific elected official were required to deliver them. Time is of the essence when lives might be at stake. Emergencies do not keep office hours.
  - c) The proper role for governors? Reassuring the public and supporting first responders using all the non-emergency warning means readily available to them by working with their public relations departments as well as local and national broadcast news organizations.
- 4. NCTA states: While operators are currently working with vendors to purchase new equipment or upgrade their existing systems to be CAP compliant, they do not want a scenario to develop where they are deploying new patches on equipment in live systems during or after the compliance date (assuming manufacturers are able to provide timely updates in firmware and software to comply with the changes that may result from this rulemaking). Nor would operators and EAS message originators want to disrupt consumers' television programming or risk consumers becoming desensitized to emergency information because of false message triggers or other malfunctions while the bugs are being worked out of the system.
  - a) The scenario that the NCTA outlines above exists now! The BWWG definitely agrees with NCTA on this point, but must remind the Commission that there are real costs in dollars, time and effort once a device is shipped that are already being absorbed by entities subject to Part 11 compliance. Those

monetary and non-monetary 'costs,' related to installing updates and any 'debugging' that needs to be done are already impacting many broadcasters.<sup>11</sup>

b) The BWWG believes some of the 'installation angst' we are hearing about could have been avoided if the Commission had set up a process where new FCC Rules were in place <u>before</u> any new CAP-EAS equipment was shipped. We remember that in the 1994-1996 period prior to the 1997 EAS launch that the FCC and stakeholders participated in field tests before major equipment orders were placed. While not all 'bugs' and 'glitches' were caught, we look back on that experience as a lesson we all should have learned by 2011 as we attempt to take EAS to the next level of improvements.

#### K. SAGE

- 1. The legacy EAS system and 'daisy chain' be kept in place to act as a backup for CAP.
  - a) The BWWG agrees about SAME being a present backup for CAP during a transition period, but we feel bound to inject that this should not mean that we should continue to use SAME for every activation. A date must be set for the end of SAME.
- 2. The evolving CAP/EAS system should not be limited to the capabilities of the legacy EAS system.
  - a) The BWWG agrees
- 3. The use of CAP text should be required on video crawls when that text is available.
  - a) The BWWG agrees.
- 4. Legacy EAS should not be modified to try to send additional CAP data such as URLs as EAS FSK data.
  - a) The BWWG agrees. Entirely new CAP-capable equipment should be used. The safety of lives and the protection of property should not continue to depend on warning technology that is almost 20 years old any longer than absolutely necessary.
- 5. The ECIG Implementation Guide should be used to define how CAP messages are translated to EAS.
  - a) The BWWG agrees.
- 6. Broadcasters should be required to monitor a CAP source to receive federal IPAWS messages, and state messages if an FCC approved state plan is in place.
  - a) The BWWG agrees, but must remind the Commission again that some EAS participants and cable systems will have to monitor more than one state server.
- 7. The FCC should not write particular access methods or protocols for CAP acquisition into Part 11, instead referencing an appropriate protocol document in the case of IPAWS, and deferring to an FCC approved plan in the case of state/local messages.
  - a) The BWWG heartily agrees with SAGE.
- 8. Intermediary devices should be required to pass conformance and certification requirements for proper EAS output, tones, protocols, and procedures.
  - a) As mentioned elsewhere in these Reply Comments, and in our own Comments, the BWWG believes that allowing so-called intermediary devices or CAP-converters was a very regrettable penny-wise and pound-foolish mistake.

<sup>• 11</sup> The BWWG has been monitoring our own email remailer and other remailer sites where EAS stakeholders are raising some CAP installation issues related to software versions and "glitches". We also have subscriptions to several state and local EAS Committee remailers where these issues have been raised, and are now aware of an email issued by the National Weather Service (NWS) on July 27 concerning problems after the Springfield, Massachusetts tornado in June, 2011. The NWS received complaints that the audio of the Tornado Warning was unintelligible on multiple EAS stations in Connecticut, Rhode Island and Massachusetts. The NWS email went on to state that the manufacturer in question would issue "a software update by the end of August."

However, the CAP-converter horse has not only left the barn but appears to now be causing collateral damage by delaying the sunset of legacy EAS.

- b) The BWWG can now only hope that CAP-converters bought and installed prior to the release of Part 11 revisions will be phased out as quickly as possible, and that a revised Part 11 makes it clear that these devices will not be part of a long term broadcast/cable/satellite public warning strategy.
- 9. The Rules should not mix what is done with a CAP message vs. how a CAP message is delivered. Rigorously specify what is done with a CAP message. Let the market decide how to acquire, the message from IPAWS as well as state CAP messages.
  - a) The BWWG agrees.
- 10. (The Commission should) Require certification of CAP compliance, but use the FEMA IPAWS conformity assessment process as the starting point, and to allow the FCC process to accept the 2011 FEMA test report as sufficient for certification of existing devices that have passed that test.
  - a) The BWWG agrees.
- 11. The CAP 1.2 profile, the IPAWS 1.0 profile, and the ECIG Implementation Guide should be accepted as the definition of how to encode and translate CAP messages to EAS.
  - a) The BWWG agrees
- 12. The two-minute time limit should be used for Governors Must Carry alerts.
  - a) The BWWG totally disagrees with the premise SAGE assumes in this suggestion. The BWWG believes that a limited number of mandatory EAS event codes should be made mandatory -- with the two-minute time limit as SAGE recommends. BWWG again states that there should be no governor mandatory Event Code for EAS!
- 13. The priority scheme be abandoned as obsolete, but continue to require that the EAN message always supersede any other action in progress, and the Governors Must carry be given a priority above other alerts, but below EAN.
  - a) The BWWG agrees, but with the few life-safety based mandatory EAS event codes the BWWG mentions in its Comments having priority over other EAS event codes.<sup>12</sup>
- 14. The EAN procedures be simplified, and EAT have no specific role in EAN procedures.
  - a) The BWWG agrees.
- 15. The Attention Signal Rule should be simplified so the signal is only used as an audience lead-in to an alert. Keep the frequency specification, but lose the other EBS legacy functions. Reduce the duration of the signal for test alerts.
  - a) The BWWG agrees.
- 16. Alerts received without an EOM be relayed, since alerts relayed immediately (while they are still being received) are always sent anyway, and there may be valid alert content even in a stored message.
  - a) A qualified BWWG agreement here. We think that it is technically possible that new CAP-EAS devices can be 'patched' with a routine that will turn a defective warning that is just missing its EOM to recognize that fact and insert an EOM.
- 17. For disabled persons, use the CAP text in the crawl, and use Text to Speech based on that crawl if audio is not available for the alert.
  - a) The BWWG agrees.

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<sup>&</sup>lt;sup>12</sup> BWWG Comments, page 6: CAE, EVI, CEM, TOR, TSW

- 18. SAGE recommends AGAINST:
  - a) Requiring encoders to originate CAP messages.
    - (1) The BWWG agrees. Broadcasters and cable systems have no business originating local or state EAS warnings. This is the exclusive responsibility of legally authorized emergency managers and the National Weather Service.
  - b) Modifying legacy encoder/decoder hardware interface requirements.
    - (1) The BWWG believes we should set a sunset date for the use of all legacy EAS devices, certainly not modify them.
  - c) Extending the 180-day Deadline.
    - (1) The BWWG, NAB, NASBA and others disagree with SAGE on this issue.
  - d) Over-specifying interface options, such as the presence of an IP port.
    - (1) The BWWG reluctantly must disagree. Depending upon the SECC plans in some areas, there are a substantial number of EAS participants that cannot receive more than two audio sources at their monitoring site. In some cases they have already purchased new CAP/EAS devices with only two audio inputs. These EAS participants should be assisted to accomplish their mission until CAP is available in their area without being forced to purchase yet another EAS device.
  - e) Using Speech to Text.
    - (1) The BWWG agrees. Text-to-speech? OK.

#### L. TFT

- 1. CAP converters OK. If intermediary devices were not permitted, EAS Participants would need to replace their entire complement of EAS equipment.
  - a) The BWWG believes that there should be a time limit on converters. We must further point out that all entities subject to EAS compliance will eventually have to replace legacy equipment if we all expect to really improve warnings not only for the general public, but for the various disabled communities. Several representatives of these communities filed Comments in this proceeding that support the BWWG's contention.
- 2. Also calls for 180 day extension
  - a) The BWWG agrees.

## M. Osenkowsky

- 1. The Commission has adopted an "as often as necessary to ensure compliance" with many tests and measurements that previously were required at specified intervals (frequency measurements, remote control calibrations, etc.) The same should be applied to EAS tests. Weekly tests for non-primary stations serve no purpose. No other station is monitoring them for relaying of information. Monthly tests are a distraction to listeners and if they are continued to be required, should only be relegated to overnight hours. For AM daytimers this is not an issue since the program line is interrupted to transmit the data and message. No primary station is an AM daytimer. Eliminating the requirement would allow States to formulate perhaps an annual test to verify proper equipment operation. The deadline for CAP compliance should be extended to January 1, 2012, as many State EAS Plans have not been formulated waiting on the Commission to publish final Part 11 Rules. Such an extension would provide sufficient time to have final State plans in effect. The two-tone alert should give way to less obtrusive, more meaningful data bursts that are more representative of today's technology. The above would be more incentive for broadcasters to embrace the EAS system and not treat it as something they "have to do because the FCC said so".
  - a) In its Comments, the BWWG stated that the RWT in its present form should be taken out of Part 11. The BWWG believes that regular tests should continue using CAP as soon as a given state/region is ready, originated by authorized

- state or local emergency officials, but should be monitored closed circuit via the Internet and not broadcast over the air.
- b) The BWWG continues to believe the Required Weekly Test (RWT), usually just data bursts triggered by an automation system, is no longer useful or relevant and should be deleted. Some of the existing plans, in states like Michigan, already encompass far better methods of determining that each and every EAS device is on line and operating. The FCC could, and should, utilize such methods and, via a simple report from the SECC, determine if the EAS devices are on and ready to respond.
- c) Therefore, it seems to the BWWG that in those areas where CAP is deployed, there is no need at all for RWT's. In areas where CAP is not yet implemented, the Required Monthly Test (RMT) may still have value as a system end-to-end test. As such, in areas where the SECC cannot demonstrate operational readiness, the RMT should continue, perhaps even allowing the SECC to increase the schedule to every three weeks, until the system integrity has been proven to the SECC so frequent tests are no longer needed.
- d) Further, the federal CAP aggregator could and should originate closed circuit CAP testing as soon as possible after the aggregator's IP address is made available.
- e) Such CAP closed circuit tests could occur daily. Monthly tests should be, as is the practice, done over the air to keep the public aware of the role of broadcasting in emergencies or disasters.
- f) No change has to be made to the way the current RWT event code works since RWT's are never automatically relayed.
- g) The BWWG believes that more will be accomplished regarding testing the EAS when more local and state emergency managers 'buy in' to using the EAS. We already have seen more problems with EAS 'smoked out' and solved when AMBER alerts began in 2002 that were ever (or could ever) be uncovered by the present RWT event code.

### N. Trilithic

- 1. Wants to get rid of attention signal
  - a) The BWWG says, absolutely not! We have spent several generations educating the public to listen for the current two-tone attention signal as a prelude to actual warning messages. If we get rid of it now, three things could happen. (1) Marketers will use the signal for commercials and (2) it will take time to educate the public about a new attention signal, or (3) the public will fail to pay attention to warnings with no attention signal. BWWG believes the public will keep listening for the old attention signal and thereby not pay attention to real emergency warnings rapidly enough to take prompt protective action.
- 2. Says that the introduction of CAP into the existing framework of EAS significantly improves access to emergency information to persons with disabilities for several reasons, particularly if the CAP description and Instruction fields are to be displayed on video services.
  - a) The BWWG definitely agrees with Trilithic and others who make this point, and in fact made this point ourselves in our Comments.
- 3. (CAP) Is capable of multiple language message dissemination. This (capability) also is contingent upon CAP text being applied to EAS display.
  - a) The BWWG predicts that with CAP foreign language EAS participants will now have a text they can use to translate the information into their own language as well as text that can be displayed visually in other languages. Broadcasters and cable systems will also have text that they can use for multiple translations on their websites and their text message services.

- b) While text-to-non-English translations are less than perfect, they would be much better that the current situation where people at risk who do not speak English may not receive any warning. SAME does not permit these improvements. It only will delay them. The Commission itself has been asking, for years, how to resolve this Issue. This is our collective chance to move forward now.
- 4. Encourages the use of CAP origination, which (potentially) has a much broader public notification path (cell phone, internet, signs, sirens, etc) affording a wider base of messaging services both audible and visual. Failure to incorporate CAP messages into EAS may discourage emergency personnel from sending CAP messages.
  - a) The BWWG heartily agrees.
- 5. Provides meaningful text for the hearing impaired. This assumes that the Commission chooses to require (or at least allow) CAP text to be displayed by EAS equipment.
  - a) Again, the BWWG heartily agrees.
- 6. Trilithic believes that a "CAP-Centric EAS System" will happen on its own as a result of the rules currently considered, and that only then can the rules be efficiently "tweaked" to finalize the transition.
  - a) The BWWG agrees. The Commission should do nothing to stand in the way of this process.
- 7. In response to Paragraphs 49 and 50, we completely disagree with the CSRIC recommendation that EAS Encoders be capable of rendering a fully compliant CAP message. To begin with, CAP messages are designed to be ingested by virtually all warning technologies, not just EAS Decoders. For Legacy SAME based EAS it makes sense to define the hardware needed to originate messages in strict accordance with physical (FSK, etc) parameters, but CAP is essentially a platform independent messaging format, and can easily be rendered by Emergency personnel using a standard PC or a web based interface (this includes being able to initiate messages from mobile devices). In addition, there is no transport defined for the EAS Encoder to transmit a CAP message. An RSS feed works well for a CAP device to retrieve messages, but is not a suitable mechanism for transmitting a CAP message. Transmitting CAP messages over FSK is not feasible as it could take several minutes, and would have to occur without any audio glitches for the entire transmission. It is our belief that Emergency Personnel using the tools already available to them should originate CAP messages. By virtue of the current CAP/EAS mandate CAPEAS Encoder/Decoders can simply translate those messages into the EAS domain.
  - a) The BWWG agrees.
- O. Prometheus Radio Project
  - 1. Allow the use of intermediary devices to meet CAP obligations
    - a) The BWWG disagrees. The FCC continually emphasizes the need for LPFM stations to serve underserved and niche markets with an emphasis on the word 'Local'. Nothing is more important (or more local) than assuring that timely and complete public warnings for an emergency get to those at risk through all available means so that those at risk can take timely and proper protective actions.
    - b) The BWWG believes that LPFM's, as part of their intended purpose to serve the underserved, should be key players when it comes to modern CAP emergency information dissemination. LPFM's should be capable of providing the full message content that CAP can provide, both on the national level as well as at the state and local levels.
    - c) The BWWG must remind the Commission that most LPFM's are not staffed 24/7/365 so they need the complete message capabilities that CAP offers to, as we said, better serve the underserved.
  - 2. Extend the CAP compliance deadline to 360 days.

- a) Along with the majority of other Commenters, the BWWG believes 180 days should be sufficient.
- 3. Consider further case-by-case extensions for participants without IP connectivity.
  - a) The BWWG says, require that any entity requesting an extension (or waiver) must explain why the need exists and that an officer of the licensee sign the certification statement.

#### P. Verizon

- 1. Verizon asks for a 90 day extension
- 2. Verizon says that providers should be able to weigh for themselves the costs and benefits of using intermediary equipment, versus more widespread replacement of EAS equipment. Foreclosing this option would not only result in unnecessary new expense for providers, but also would likely result in additional delay before CAP could be implemented, given the time required to order, install, configure, and test new equipment.
  - a) The BWWG disagrees with Verizon. We believe they have it backwards. Eventually all entities subject to Part 11 will have to convert to full CAP compliance. CAP converters are an unnecessary detour on the road to full CAP EAS capability.

#### III. SUMMARY REPLY COMMENT OBSERVATIONS FROM THE BWWG

- A. A Rapid Transition Path to CAP Will Best Serve a Public At Risk
  - 1. From the beginning of EAS in 1997, broadcasters have raised concerns about the differences between the audio message and the text produced by the EAS equipment. Some state and local plans ask broadcasters to repeat the information in the activation. That can be difficult, if not impossible to do with the SAME technology. Not all the legacy EAS equipment had the ability to store and playback the audio portion of the EAS message. Now, when stations of all sizes are operating with automated equipment, there are fewer people on staffs to hear the EAS message and timely glean enough information to even know which agency issued the activation. CAP provides the solution to these problems, but it only works if state and local authorities obtain the CAP technology and use it. Broadcasters in areas where this has been done should be allowed and encouraged to send the full CAP message rather than the SAME message. The American public will be better served by a rapid transition to CAP warning technology rather than making short-term open-ended accommodations for a relatively few broadcasters.
  - 2. The BWWG reached out to a highly respected emergency manager in the State of Washington, Don Miller. Mr. Miller gave us his opinion on the issue of the pace of the conversion from SAME/CAP EAS to CAP EAS. He outlines conversion concerns specific to the primary originator for local/regional EAS events, the National Weather Service (NWS). The BWWG agrees with Mr. Miller who told us:
    - a) "The installed base of NOAA weather radios with hundreds of thousands nationwide makes replacing SAME very difficult and expensive. I think it should be left up to the Weather Service to make the transition to digitally based NOAA weather radios as funding is made available. That funding may not happen for years based upon the current financial crisis we face. I don't count on it happening soon and one of the budget discussions revolves around eliminating the NWS altogether. I suspect that NWS will continue to exist but with less funding that will delay upgrading to a completely digital architecture. It's a great goal to move to a completely digital environment, but the reality is we cannot afford to do it soon. My guess is that we're stuck with SAME for another 10 years. But, having said that CAP is opening doors to all kinds of digital devices.

We will be able to reach Deaf and Hard of hearing devices, cell phones, Wi-Fi devices, 3G, 4G and LTE devices soon with our EAS alerts."

- 3. We feel that Mr. Miller's statement that "CAP is opening doors to all kinds of digital devices" is worth highlighting for the record as a reminder that all stakeholders have to work together for the real goal, improving public warnings for all at risk.
- B. Language Translation
  - 1. The BWWG has proposed possible solutions for this issue in our Reply Comments, but we again quote Mr. Miller who offered his observations to us from the point of view of a respected professional emergency manager:
    - a) "Language translations bring to mind the 85 plus languages spoken on the West coast. How do we technically translate into each of these languages and send it over radio and TV without taking a few hours to do it? One possibility is to require all other than English EAS participants to purchase software that converts the CAP English text to the station's primary language before relaying to the public. This can be done at the stations that need the conversion. But what about the other 75 plus languages that do not have EAS participants broadcasting in their spoken language? Social media tools and applications are available to quickly convert English but these devices are expensive and few of our foreign language based citizens can afford these devices."
- C. Defining the Common Alerting Protocol (CAP) in Part 11
  - 1. While Commenters talked about the CAP, none, including the BWWG, suggested adding a formal definition of CAP to Part 11.2. The BWWG would like to suggest that a broadcast EAS specific definition for CAP be added to 47 CFR Part 11.2 as follows based on the definition posted on the website of the Organization for the Advancement of Structured Information Standards (OASIS). OASIS was the organization that confirmed CAP as a recognized international standard<sup>13</sup>:
    - a) CAP: The Common Alerting Protocol (CAP) is an open, non-proprietary international format based on the XML markup language for exchanging all-hazard emergency alerts and public warnings over all kinds of warning dissemination means, including the EAS. CAP allows a consistent warning message to be disseminated simultaneously over many different warning systems, thus increasing warning effectiveness while simplifying the warning task. CAP also facilitates the detection of emerging patterns in local warnings of various kinds, such as might indicate an undetected hazard or hostile act. And CAP provides a template for effective warning messages based on best practices identified in academic research and real-world experience.
  - 2. The BWWG would also like to suggest that the specific means (generally referred to as a profile) developed by the EAS-CAP Industry Group (ECIG) that CAP that EAS devices use to parse CAP messages from warning originators be defined in 11.2 as well<sup>14</sup>:
    - a) "CAP EAS Profile: The ECIG Implementation Guide describes how an alert will be presented to the public via CAP-EAS, so that originators and distributors of alerts can deliver the intended message to the public, regardless of the vendors or platforms involved."

<sup>&</sup>lt;sup>13</sup> The BWWG feels that it is important to put into the Commission's record for 04-296 proceedings a link to the Organization for the Advancement of Structured Information Standards (OASIS) website because of its vital CAP role and as a citation for most of the definition we are proposing: [http://www.oasis-open.org/org] The BWWG would however be remiss unless we also acknowledge Mr. Art Botterell, one of the 17 founding Trustees of the Partnership for Public Warning, who is the acknowledged architect of the CAP. Mr. Botterell maintains a website that many in the emergency management community consider a valuable emergency public information resource: [http://www.incident.com/].

<sup>14</sup> http://www.eas-cap.org/documents.htm

- D. EAS: Standards and Practices and the User Experience
  - 1. The BWWG notes that virtually all Commenters come from a point of view that in some ways sets them apart from the point of view of an American public at risk. To balance this, the BWWG feels it should refer the Commission and other stakeholders to two articles authored by Mr. Art Botterell, the acknowledged father of the CAP.
    - a) The first is titled A Standard of Practice for Public Warning<sup>15</sup>
    - b) The second is titled The "User Experience" of Warnings in EAS<sup>16</sup>
  - 2. Both provide much needed guidance and perspective for decisions related to the improvement of origination and propagation of public warnings.
  - 3. The BWWG believes both should be required reading by anyone in the Commission responsible for the future of EAS. We also believe that they should be required reading for all EAS stakeholders.
  - 4. The former comes from the premise that "Public warnings are urgent communications issued from time to time by various entities in an attempt to reduce preventable injuries or deaths."
    - a) The five principles it covers are:
      - (1) When should a public warning be issued?
      - (2) By whom should a public warning be issued?
      - (3) To whom should a public warning be issued?
      - (4) What should be the content of a public warning?
      - (5) How should public warnings be disseminated?
  - 5. The latter clearly explains that the CAP "...only defines the information 'payload' of a warning. It doesn't specify how that information should be presented over HD radio, digital TV, computers, PDAs, digital signage or any of our various other windows into the infosphere."

#### IV. CONCLUDING REPLY THOUGHTS FROM THE BWWG

- A. A Rapid Transition to CAP is in the Best Interests of an American Public at Risk
  - 1. The American public will be better served by a rapid transition to EAS-CAP warning technology rather than making short-term open-ended accommodations for a relatively few broadcasters.
- B. The Potential for EAS Abuse Exists as long as SAME is Still Authorized.
  - 1. As long as we continue to use SAME, broadcasters will be vulnerable to security problems and false activations.<sup>17</sup> Programmed legacy EAS equipment is taken out of service when new CAP EAS is installed and could fall into the wrong hands. Anyone with even a low power transmitter located close to an EAS control point and a little knowledge (easily available on the Internet) could generate and send SAME EAS event codes that could be received and retransmitted by radio and TV stations. Many state and local plans are posted on the Internet. At the very least this could create confusion. At worst, it could create chaos. Either way, bogus EAS messages issued using legacy EAS devices will damage the credibility of the EAS and cast a shadow on the validity of all emergency warnings.
  - 2. While there is no evidence that such breaches have occurred, by encouraging SECCs and LECCs to expedite the conversion to CAP, the FCC will enhance the security of EAS alerts and mitigate the possible misuse of existing EAS devices that are sold or discarded by EAS participants, emergency managers, and cable systems.

<sup>15</sup> https://www.incident.com/blog/?p=57

<sup>16</sup> https://www.incident.com/blog/?p=50

<sup>&</sup>lt;sup>17</sup> The BWWG notes that many in the broadcast industry have, for 15 years, noted the potential for troublemakers to break into STL transmissions and broadcast false EAS messages due to the lack of security inherent in the SAME system.

- 3. Further on this point, the BWWG suggests that the Commission direct those phasing out legacy EAS equipment to **not** donate it or offer it for sale to the general public, or otherwise dispose of legacy EAS equipment in a manner that would mean it could fall into the wrong hands.
- C. The EAS User Experience
  - 1. The BWWG can think of no better way to conclude our Reply Comments than to directly quote from the last paragraph of Mr. Botterell's article on the EAS User Experience:<sup>18</sup>
    - a) "The Common Alerting Protocol (CAP) provides a rich standard data payload that can be presented... hopefully consistently... over all media, broadcast and otherwise. But the details of how best to present that richer message are still to be determined and require immediate skilled attention."

## Submitted by:

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<sup>&</sup>lt;sup>18</sup> Ibid.